## Presentation to the Bay-Delta Advisory Committee:

## ISSUES RELATED TO THE DEFT EFFORT Elise Holland, The Bay Institute July 17, 1998

The Diversion Effects on Fish Team (DEFT) was tasked by the Calfed Policy Group to determine the relative benefits and impacts, to the fish species of concern, of the three Delta alternatives. The scope of work was limited to the legal Delta, and there was no attempt to optimize the scenarios, in other words, we did not attempt to minimize impacts to fish or maximize benefits to fish as a result of altering the configuration of the Delta. We compared existing conditions to the No Action scenario, Common Programs, and Alternatives 1, 2, and 3, and then scaled our results.

There is a great deal of uncertainty surrounding the DEFT analysis and quite a few assumptions, which may or may not enjoy consensus. This is also a broadstroke analysis intending to paint of picture of how a change in the point of diversion might be manifest as benefits or impacts to various species of concern in the Delta. The uncertainties exist throughout and in my opinion would become magnified in the drier periods. In addition, assumptions were made as to implementation of the Common Program elements and how benefits would be derived in the Delta. We focused on the screening of in-Delta diversions and the creation of shallow water habitat and assumed full implementation. In short, the DEFT analysis though credibly, is limited, and should be viewed as such.

The DEFT analysis has gaps including: lack of species breadth, limited modeling, short time line, limited scoping of Common Program elements, lack of water quality (toxic) information, uncertainty about flows below Hood, uncertainty about screen (Hood) effectiveness for some species, the role of exotics in the Estuary, limited geographic scope, and the lack of a definition of recovery. Nevertheless, Alternative 3 was shown to provide the most benefit to the species of concern.

The DEFT has now be tasked by the Calfed Policy Group to design the best through-Delta alternative from a fisheries perspective while considering water supply and water quality. To my mind this is a bigger challenge for the simple reason that there is a need to prevent further species decline, further decline in water quality, and to continue to meet demand in the first phase of Calfed (7-10 yr.) while we are answering critical questions.

Having said this, however, there is an important fundamental flaw underlying the DEFT analysis that stems from our use of Calfed's study 516 as our basecase. This run includes existing biological opinions, VAMP, and 2020 LOD reflecting an increase in demand of 600,000 – 1 MAF. To my mind, Calfed should build a new basecase which reflects the reality of existing policy, including all the AFRP b2 actions and 1995 LOD as a first step. This new basecase could then be used to do runs related to optimization of the existing system to provide increased fish protection benefits, improve water quality and continue to meet demand.

The basic hypothesis is that it may be possible to meet these three criteria via system optimization from an operational flexibility perspective, and through the use of other tools such as groundwater storage, conservation, recycling, transfers, and watershed management. Calfed currently has it backwards. Improving the existing operations to meet near term goals, more realistically defining future demand, and then determining how to get there with the existing Delta configuration and other is the more sound approach to developing a long term solution.